



GLOBAL PLASTICS LETTER

E-mail: mettenson@globalplasticsletter.com
Website: www.globalplasticsletter.com

“A World of Plastics Information”

Part news. Part views.

JULY 2013
Our 15th year

Dear Colleague:

Interest rates rising indicating inflation returning. May 1, 2013 was the start of the long expected interest rate increase, with 30 year U.S. bonds climbing from 2.81-3.55%. Inflation is expected to rise to about 2% by years end and continue gradual climb into 2014. After a decade of steadily rising oil prices, a dramatic reversal looms. More production, greater fuel efficiency in autos and alternative energy sources should cause oil prices to fall 20-30% by 2016, with the crude barrel cost between \$65-75 down from \$95 levels since 2011. Translates to gasoline to retreat to \$3.00 per gallon. Expect a slow but steady rise in natural gas prices...from the current MMBtu to \$5-6 per MMBtu; also by 2016. On the technology side: printed electronics of polyester, PC, and other high performance flexible plastic films, less than 1 mm thick. They can bond to many surfaces and for example, an entire auto dashboard can become one big screen with no buttons at all.

TRENDS: The global market for Engineering Plastics is expected to grow at a compound annual growth rate of 5% and be at 29 million tonnes by 2020, with a projected value of over \$100 billion. Leading producers are Arkema, BASF and Bayer MaterialScience (whose PC sales have slowed). Look for development of electric circuits that use less power when devices are turned off, using potentially 75% less electricity to run computers and other electronics in standby mode.

Also new 911 smart phone apps are coming that will tap phone's camera and sensors to send vital medical statistics in emergency situations. Germany's plastics industry indicates U.S. will become a “petrochemical superpower” due to its reserves of shale gas. U.S demand for high temperature plastics forecast to reach \$3.1 billion by 2017... growing at 5.8% annually.

OUTLOOK EUROPE: ... by Ralph Ammann, our EuroZone correspondent in Germany

At the world's leading plastics show, K 2013, BASF will introduce their new Ultracom system which is aimed at the field of engineering plastics for automotive construction. Ultracom is said to be a package of three components: Continuous fiber reinforced semi-finished products, adapted overmolding compounds and the complementing engineering support. The key innovations in this new approach are laminates based on woven fabrics that are fully impregnated with Ultramid or Ultradur, the polyamide and PBT materials from BASF. The second component of the Ultracom package consists of the overmolding materials that have been developed individually for use with these laminates. The third component covers the extensive engineering support provided by the BASF application engineering group. With these materials and engineering support, the company will take part actively in the further development of lightweight automotive construction with plastics. As part of this Ultracom package, BASF has installed a high-capacity composite production pilot plant in Ludwigshafen. Since March 2013, this equipment is being used to produce multifunctional composite test specimens by means of the in-mold forming/over molding process. Central element of the cell is a six-axis robot with specific gripper arm. Moreover, the company has developed its own multi-functional test part: The so-called CIFO part makes it possible to investigate continuous-fiber reinforced composite parts for volume production in the manufacturing cell. Also the capabilities of the simulation instrument Ultrasim have been expanded so that the behavior of components made from thermoplastic laminates and over molded polyamide can be calculated and predicted reliably.

German-based semi-finished products manufacturer Röchling Group announced an encouraging start in the 2013 fiscal year. According to the company sales reached EUR 305.7 million, exactly the same level as in the first quarter of 2012. Incoming orders of EUR 316.0 million were slightly higher. At the end of the first quarter of 2013, the group had 7,305 employees. For the current year, CEO Georg Duffner sees a good chance that the Eurozone will benefit from an increase in worldwide demand in the second half of the year. "We are proceeding full speed ahead on our internationalization course and boosting our independence from regional market developments," he stated. "At the same time, we are promoting growth with new products for new markets."

Elsewhere, French-based Air Liquide Global E&C Solutions has signed contracts with Fujian Jinfeng Technology Co., Ltd and Fujian Zhongjin New Material Co., Ltd, both located in Fujian province, China, for new PA6 plants. The contracts include the design of the plants, the delivery of proprietary equipment and the technical services for a total capacity of 360,000 tons per year of PA6. They will feature the Zimmer® technologies Full Recovery concept as well as the newest generation of proprietary reactors with a single line capacity of 400 tons per day. These contract awards are said underline the position of Air Liquide Global E&C Solutions as the world market leader in PA6 technologies, both in terms of global capacity and largest single line capacity.

OUTLOOK ASIA...by Mal Binnie, our Pacific Rim correspondent in Australia.

The \$Au is now down to 92.01 to the US\$ and some experts are predicting below 90 by year end. The Reserve Bank has this week held interest rates at 2.75% but has indicated lower rates may follow. Reports from plastics distributors indicate tough business conditions with stock levels being decreased. Plastics and Chemicals in Australia have an annual turnover of close to A\$40 billion it is the second largest manufacturing sector and employs over 60,000. But regulation makes the industry complex and reviews promised in 2006/2008 have not been implemented. Many of these issues were addressed at the Plastics and Chemical Industries Association meeting last month. Industry leaders are making the current and future Governments aware that competitiveness in industry are critical to the future growth of jobs and regulation must help rather than hinder this growth.

Kevin George, MD of Thermo Tec Plastics Melbourne has announced the appointment of Greg Munneke as Victorian State Manager. Greg has over 25 years plastics distribution experience and will assist Thermo Tec in its growth plans. York Precision Plastics and Polystrom Plastics have announced a relationship for the production of Polyflute polypropylene. Although the mining industry is undergoing difficulties in exports AIMEX 2013 to be held in August 2013 will be an opportunity for plastics manufacturers and distributors to assist in productivity improvements in this industry sector. Reports from NZ show that the manufacturing industry is continuing to improve - PMI currently at above 54 shows year on year improvement. Also NZ is proving more cost effective than Australia with a call centre transferring jobs from Australia to NZ.

Impack Pratama the Indonesian based parent company of Mulford Plastics has opened a new PC extrusion facility in Vietnam. The total production capacity of the Company is now 21000 tonnes per annum as reported by their owner Mr. Haryanto Tjiptodihardjo. Vietnam's plastic industry is still showing growth in demand of 15-20% per annum.

The recent US plastics executive in a hostage crisis which is reported as a total shakedown of his Company which is \$500,000 poorer; in fact some experts are predicting more of these events. At the same time investment in China continues. Bemis acquiring a specialty film manufacturer whilst Chinese companies are focusing on export markets to make up for weaker domestic markets. The PMI for June slowed down to 48.3 in June a 9 month low with output down to 50.7. Still growth is expected to reach 7.4% although some forecasts have it as low as 6%. Employment law in China saw plenty of action in June and updates can be obtained from a firms legal advisor or Baker and McKenzie at chinalaw@bakerxchange.com.

Polyplastics Co. Ltd Tokyo has established an office in Jakarta Indonesia, the office is headed by Haruji Murakami. Thailand's Royal Interpack, a member of the Royal Group has a fully integrated PET bottle to food grade flakes system and while currently processing up to 80% regrind PET sheet it is aiming for 100% rPET. Teijin Ltd plans to establish a special division to identify promising partners and M & A opportunities. Teijin also announced they have newly developed technology for their Plantext Bioplastic to increase its thermal and impact resistance. Sumitomo Bakelite Tokyo, Japan is targeting India with the opening of sales office and warehouse. Martin

Hehenburger will head up the new Taiwan operations for NGR GmbH. Samsung Petroleum and SGL Carbon AG, Germany has started a JV for marketing and sales of carbon fibre composites.

INDIA TODAY - by **S. Radhakrishnan, Group Editor, Popular Plastics & Packaging, Mumbai, India**. To give a push to the plastic sector, the Indian government will set up six 'plastic parks' during the 12th Plan period. These plastic parks will come up in Punjab, Haryana, Rajasthan, UP, Odisha and Andhra Pradesh. Already work on four plastic parks is in process. The plastic park scheme envisages the cluster of plastic industry where a plastic reprocessing and recycling plant and waste management system is set up in PPP mode. The Government also provides subsidy with a maximum cap of Rs 40 crore per project on setting up a plastic park. The consumption of plastic including PE, PP, PVC in the country is pegged at 9 million tonnes per annum, out of which 2 million tonne is imported from other countries including Taiwan and China.

Reliance Industries (RIL) recently announced an investment of Rs. 1.5 trillion in core business of petrochemicals and oil and gas as well as in retail and telecom sectors in the next 3 years. RIL is aiming to be among top 5 petrochemical producers in the world, the petrochem capacity is being expanded to 25 million tonnes from 15 million tonnes per year. Capacity ramp-up is underway and, as a result, its polyester business will see an expansion in capacity from 1.4 million tonnes to 4 million tonnes a year. This will be followed by the PET resin plant in the second half of the year at Dahej, making the company the seventh largest producer of PET in the world. RIL will also commission a purified terephthalic acid (PTA) plant in the first half of next year, followed by another plant of the same capacity within the next six months, taking the total PTA capacity to 4.3 million tonnes a year. Treofan Group, a global manufacturer of biaxially oriented polypropylene films, says it is no longer going to acquire India's Max Specialty Films, a subsidiary of New Delhi-based Max India Ltd., after both parties agreed to call of negotiations. Peter Vanacker, CEO, says Treofan is currently focused on "successfully restructuring and profitably growing our core businesses in Europe and the Americas." Max India will instead transfer the Max Specialty Film division into a separate subsidiary. The Indian Government is gearing up to announce a Rs 37,230 crore refinery-cum-petrochemicals project in Rajasthan in August. The capacity of the project will be 9 million tonnes per annum and will be implemented as a joint venture between state-owned Hindustan Petroleum Corporation Ltd (HPCL) and Government of Rajasthan. The proposed Rajasthan refinery-cum-petrochemicals project is scheduled to be completed by December 2017. The crude oil produced in Rajasthan is highly waxy in nature. Government sources said the proposed petrochemical complex will be the first such complex specifically designed to produce petrochemicals from the waxy indigenous crude oil.

PRICING: PP prices drop slightly, but probably not for long as some producers are limiting PP feedstock due to force majeure declarations caused by plant outages in late June. PETG sheet grade resin is trending lower. PC resin prices are up single digits in Europe and all high temperature thermoplastics stayed steady in May-June. PE and PS resins were steady to lower, as low inflation begins to change to some single digit increases.

MANUFACTURER/DISTRIBUTOR BRIEFS:

Altuglas Intl. unit of Arkema, reintroduces Altuglas II UVA and P55, products originally developed by Rohm & Haas as part of its Plexiglas sheet product line for aircraft and aerospace applications as windshields, side windows, canopies etc. Velox, German chemicals distributor will add engineering plastics such as acetal, PPS and PBT in Europe, for a Ticona jv. Indelco Plastics adds Pat Foose and Bill Stivers to its team.

MERGERS, ACQUISITIONS, ALLIANCES, EXPANSIONS AND DIVESTITURES:

Wow! Quadrant (formerly Polymer Corp.) bought by Mitsubishi Plastics (\$4 billion U.S. revenue), by way of its Aquamit subsidiary. Quadrant, whose sales of 569 million Euros in 2012, and who employs 2420 people in 20 countries, will continue. Considering the buy out of Westlake Plastics' by their French-based medical customer Actimed, the manufacturing landscape is undergoing significant change and consolidation, as has been long predicted. In Westlake's case, some extruders could go to Europe. RTP, specialty thermoplastics compounder establishes a sheet operation (producing PP, ABS, MMA PEEK PETG and PC), called Engineered Sheet Products (ESP), in a vertical integration move...Gary King to head sales & marketing. Google moving ahead with its Shopping for Suppliers initiative which promises to compete with Amazon and McMaster Carr in offering industrial products to businesses...started with light bulbs and expanding...soliciting Google Verified Suppliers. Thermoformer, Tech II Inc., is now extruding its own PP sheet.

Editor's Note ...As we approach our 15th year of publication, we are introducing a new feature:

BEST of INDUSTRY INTERVIEWS: We start with the reprint of our very first interview in November, 1999 with **Stanley Tam, founder and President, U.S. Plastics, Lima, Ohio, U.S.**

Dr. F. Stanley Tam, founder of UNITED STATES PLASTIC CORP., Lima, Ohio serving the world with plastic sheet, rod, tube, film, tanks and fittings in 1950. Then as now all sold through a catalog which is on every desk throughout the scientific community. He has traveled the world, investing his companies profits in building churches in 10 third world countries. We caught up with Stanley Tam recently in his office in Lima, Ohio.

GLOBAL PLASTICS LETTER (GPL): How long have you been in the plastics business?

STANLEY TAM (ST): Next year will be our golden anniversary – 50 years.

GPL: What got you started selling plastics?

ST: We had always been in the silver refining business and at one of the conventions, I saw the first plastic tank being manufactured in the U.S.-and bought it. Our customers saw it and said that was just what they needed to store chemicals. We bought more of these tanks and re-sold them. Then our customers asked us for plastic valves, tubing, piping and other plastics. The business grew so fast that we incorporated a new company, United States Plastics in 1950.

GPL: Why do you sell only by catalog?

ST: We had always sold our refined and smelted silver by direct mail, so I had the experience.

GPL: How many catalogs do you print per year?

ST: In excess of three million.

GPL: How big is your facility and your retail store?

ST: Our facility in Lima, Ohio is 243,000 sq ft on 5 acres and our retail store is 28,000 sq ft.

GPL: What was your most unusual sale?

ST: In 1998 we sold over 80,000 plastic boxes for Beany Babies and this year we've sold a trailerload of buckets and barrels for people stocking up for the Y2K event to hold drinking water and food.

GPL: How is this business most likely to change in the next century?

ST: We used to receive orders 90% by mail, 10% by phone. Today it's 80% phone, 10% fax, 10% Internet. It's changing so rapidly in favor of the Internet that it could reverse our current phone experience.

GPL: What advice would you give someone starting out today?

ST: Provide SERVICE or you won't survive.

GPL: What is your outlook for business next year?

ST: We think it's going to be good and are planning for that – in fact we're adding 17 new pages to our 2000 Catalog.

GPL: What is your motto?

ST: Never borrow money and be aware of miracles! We built this business with no debt and when we needed money to expand the business, being in the silver refining business, we watched the silver market multiply 10 times in a very short time we sold our silver stocks and got the funds to expand ... and I consider that to be a miracle!

Thank You.

Information contained in this newsletter has been taken from trade and statistical sources that we consider reliable but we cannot assure its accuracy or completeness. Any opinions expressed reflect our judgement as of this date and are subject to change.

MEL ETTENSON'S GLOBAL PLASTICS LETTER™
is published monthly by Lucitron Corporation,
P.O. Box 250235, Franklin, Michigan 48025,
USA. Postage paid at Royal Oak, Michigan. \$175 for 12 issues.

ISSN: 2164-7291

Subscription or Editorial Information: 248/258-5657
Fax Number: 248/258-0851
E-mail: mettenson@globalplasticsletter.com
Website: www.globalplasticsletter.com